

Appln. No. 09/721,700
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (original) A method for assembling a forward link traffic multiplexing frame for transmission of a plurality of packets over a radio link, comprising:
 - (i) determining a plurality of packets associated to a group;
 - (ii) assembling the group of determined packets in a forward link traffic multiplexing frame;
 - (iii) providing an identification of the group in the forward link traffic multiplexing frame; and
 - (iv) providing an identification of a destined terminal for each of the determined packets in the group.
2. (original) The method according to claim 1, wherein providing the identification of the group includes providing a group identifier.
3. (original) The method according to claim 1, wherein providing the identification of the group includes providing a group identification field.
4. (original) The method according to claim 1, wherein providing the identification of the group includes providing a group length field.
5. (original) The method according to claim 1, wherein providing the identification of the group includes providing a group number field.
6. (original) The method according to claim 1, wherein providing the identification of the destined terminal for each of the determined packets includes providing a sub-user identifier.
7. (original) The method according to claim 1, further including assembling a plurality of groups in the forward link multiplexing frame.

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8. (original) The method according to claim 1, further including providing a multiplex header for the forward link traffic multiplexing frame.
9. (original) The method according to claim 8, wherein providing the multiplex header includes a number field indicating a number of groups in the forward link traffic multiplexing frame.
10. (original) A forward link traffic multiplexing frame structure for transmission of a plurality of packets over a radio link, comprising:
 - a plurality of packets associated to a group;
 - a group identification; and
 - a sub-user identification for each of the plurality of packets in the group.
11. (original) The forward link traffic multiplexing frame structure of claim 10, wherein the group identification includes a group identifier.
12. (original) The forward link traffic multiplexing frame structure of claim 10, wherein the group identification includes a group identification field.
13. (original) The forward link traffic multiplexing frame structure of claim 10, wherein the group identification includes a group length field.
14. (original) The forward link traffic multiplexing frame structure of claim 10, wherein the group identification includes a group length field.
15. (original) The forward link traffic multiplexing frame structure of claim 10, wherein the sub-user identification includes a sub-user identifier.
16. (original) The forward link traffic multiplexing frame structure of claim 10, further including a plurality of groups.

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17. (original) The forward link traffic multiplexing frame structure of claim 16, further including a number field for indicating the number of groups.
18. (original) The forward link traffic multiplexing frame structure of claim 17, wherein the number field is included in a multiplex frame header.
19. (original) A method for detecting a packet in a forward link traffic multiplexing frame that is destined to a terminal, comprising:
- (i) receiving a forward link traffic multiplexing frame at a terminal;
 - (ii) determining that the forward link traffic multiplexing frame includes a group associated to the terminal;
 - (iii) determining that the group includes a packet destined to the terminal; and
 - (iv) retrieving the packet.
20. (original) The method according to claim 19, wherein determining that the forward link traffic multiplexing frame includes a group associated to the terminal includes examining a group identifier.
21. (original) The method according to claim 19, wherein determining that the forward link traffic multiplexing frame includes a group associated to the terminal includes examining a group identification field.
22. (original) The method according to claim 19, wherein determining that the group includes a packet destined to the terminal includes examining a sub-user identifier.
23. (original) The method according to claim 22, wherein retrieving the packet includes retrieving the packet associated to the sub-user identifier.
24. (original) A wireless access network for transmitting a plurality of packets over a radio link, comprising:
- a scheduler for scheduling a plurality of packets for transmission over a radio link; and

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a multiplexer for assembling a forward link traffic multiplexing frame by determining which packets are associated to a group, assembling the group of determined packets in the forward link traffic multiplexing frame, providing an identification of the group in the forward link traffic multiplexing frame, and providing an identification of a destined terminal for each of the determined packets in the group.